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EXAMINER

SCUDERI, PHILIP S

ART UNIT PAPER NUMBER

2153

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/945,132	KING ET AL.	
	Examiner	Art Unit	
	Philip S. Scuderi	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-7, 20-27, 36-41 and 43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-19, 28-35, and 42 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to applicant's amendment filed on February 14, 2005. Claims 1-7, 20-27, 36-41, and 43 are withdrawn. Claim 30 is cancelled. Claims 8-12, 15-17, 28-29, 31-33, and 42 are amended. Claims 13-14, 18-19 and 34-35 are presented for further consideration.

Drawings

2. Examiner acknowledges that applicant has resubmitted drawings 1, 2, 3, and 6 with the additional legend of -Prior Art-. Examiner agrees that as disclosed by the specification figures 5, 7, 7A, 7B, and 7D describe embodiments of the invention. Examiner withdraws the -Prior Art- label objections.

3. Examiner acknowledges that applicant has amended the specification to include reference numbers 206 and 730. Examiner withdraws the objection.

4. Although applicant claims to have removed callout 110 the callout is still in the figure. Examiner repeats the objection.

5. Although applicant claims to have corrected figure 3 to include reference symbol 302 the reference symbol is not in figure 3. Examiner repeats the objection.

Specification

6. Examiner acknowledges that applicant has amended the title to be sufficiently descriptive and withdraws the objection.

7. Examiner acknowledges that applicant has amended that applicant has amended the specification to correct the minor informalities including submitting figure 8 without introducing new matter. Examiner withdraws the objections.

Claim Objections

8. Examiner acknowledges that applicant has amended the claims to overcome the objections. Examiner withdraws the claim objections.

9. Applicant's amendments have facilitated the following new objection due to minor informalities: claim 17 lines 7-8, "remapping the first source port of the request to source port of the selected agent". Examiner suggests "remapping the first source port of the request to a source port of the selected agent".

Claim Rejections - 35 USC § 112

10. Examiner acknowledges that applicant has amended the claims to overcome the rejections. Examiner withdraws the 112 rejections.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an

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international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

12. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

13. Claims 8, 13, 28, 31, and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen et al. (U.S. 6,389,462) hereinafter referred to as Cohen.

14. With respect to claims 8 and 42, Cohen teaches (claim 8) a method of balancing a data load on a network comprising and (claim 42) a system for balancing a data load on a network comprising a means for:

- receiving a request from a client (col. 8 lines 16-17, col. 9 lines 19-22);
- determining a first source address and a first source port from the request (col. 8 lines 31-40);
- remapping the first source address of the request to a front-end processor source address (col. 8 lines 31-33);
- remapping the first source port of the request to a front-end processor source port (col. 8 lines 34-40); and
- sending the remapped request to an origin server (col. 8 lines 53-56).

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15. With respect to claim 13, Cohen teaches the method of claim 8 as discussed above wherein remapping the first source address of the request to a front-end processor source address includes:

- storing the first source address and the corresponding front-end processor source address (col. 8 lines 33-45, col. 8 line 67-col. 9 line 3); and
- storing the first source port and the corresponding front-end processor source port (col. 8 lines 33-45, col. 8 line 67-col. 9 line 3).

16. With respect to claim 28, Cohen teaches a system for balancing data load on a network comprising:

- a central processor (col. 17 lines 36-41, fig. 1 (104)) coupled to a network (fig. 1 (102, 105, 111));
- a front-end processor coupled to the network (col. 17 lines 36-41, fig. 1 (104));
- a client coupled to the network (fig. 1 (101)); and
- a storage facility coupled to the central processor (col. 7 lines 49-52, col. 17 lines 36-41) and containing instructions executable by the central processor which configure the central processor to:
 - receive a request from a client (col. 8 lines 16-17, col. 9 lines 19-22);
 - determine a first source address and a first source port from the request (col. 8 lines 31-40);
 - remap the first source address of the request to a front-end processor source address (col. 8 lines 31-33);

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- remap the first source port of the request to a front-end processor source port (col. 8 lines 34-40); and
- send the remapped request to an origin server (col. 8 lines 49-56).

17. With respect to claim 31, Cohen teaches the system of claim 28 as discussed above wherein the remapping the first source address of the request to a front-end processor source address includes:

- storing the first source address and the corresponding front-end processor source address (col. 8 lines 33-45, col. 8 line 67-col. 9 line 3); and
- storing the first source port and the corresponding front-end processor source port (col. 8 lines 33-45, col. 8 line 67-col. 9 line 3).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

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later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

20. Claims 16 and 32 are rejected under 35 U.S.C. 103(a) as being obvious over Cohen in view of Foti (U.S. Pub. 2002/0194378) hereinafter referred to as Foti. Cohen teaches the method of balancing a data load on a network as applied to claim 8 above and the system for balancing a data load on a network as applied to claim 28 above. Cohen discloses said method of balancing a data load on a network and said system for balancing a data load on a network, further comprising:

- receiving a response from the origin server, wherein the response is responding to the remapped request and wherein the response is received in the front-end processor (col. 8 lines 37-40); and
- sending the response to the client (col. 8 lines 56-58).

Cohen does not disclose expressly said method of balancing a data load on a network further comprising the following steps, or said system for balancing a data load on a network wherein the storage facility coupled to the central processor further contains instructions executable by the central processor which configure the central processor to:

- remap a source address of the origin server to the front-end processor source address;

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- remap a source port of the origin server to the front-end processor source port; and
- send the remapped response to the client.

Foti, in an analogous field, teaches a method and a system for balancing a data load on a network comprising:

- receiving a request from a client (§ 0006 lines 1-7, § 0011 lines 1-8);
- determining a first source address from the request (§ 0006 lines 4-10, § 0011 lines 4-11);
- remapping the first source address of the request to a front-end processor source address (§ 0006 lines 10-14, § 0011 lines 11-15); and
- sending the remapped request to an origin server (§ 0006 lines 17-19, § 0012 lines 1-4).
- receiving a response from the origin server, wherein the response is responding to the remapped request and wherein the response is received in the front-end processor (§ 0007 lines 6-8);
- remapping a source address of the origin server to the front-end processor source address (§ 0008 lines 3-6); and
- sending the remapped response to the client (§ 0007 lines 8-11, § 0014 lines 30-32).

At the time of invention it would have been obvious to a person of ordinary skill in the art to modify said method of balancing a data load on a network as taught by Cohen by further including the following steps, and modifying said system for

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balancing a data load on a network by storing instructions on the storage facility coupled to the central processor executable by the central processor which configure the central processor to:

- remap a source address of the origin server to the front-end processor source address as taught by Foti; and
- send the remapped response to the client as taught by Foti.

The motivation for doing so would have been to hide IP addresses between end users, the client and the origin server, because IP addresses can reveal location information and possibly identity (Foti ¶ 0005 lines 1-5). The method of balancing a data load on a network, as discussed above, does not expressly disclose the step of remapping the origin server response source port to the front-end processor source port. Examiner takes Official Notice (see MPEP § 2144.03) that remapping the origin server response source port to the front-end processor source port in a computer networking environment was well known in the art at the time the invention was made. The motivation for doing so would have been to assure that a client application that issues a response to said remapped response would not address the response to said remapped response to an invalid front-end processor port. At the time of invention it would have been obvious to a person of ordinary skill in the art to modify said method of balancing a data load on a network and said system for balancing a data load on a network by including the step of remapping the origin server response source port to the front-end processor source port. Therefore, it would have been obvious to combine Cohen with Foti to obtain the invention as specified in claims 16 and 32.

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The Applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03, namely, "if applicant traverses such an assertion, the examiner should cite a reference in support of his or her position". However, MPEP § 2144.03 further states "See also *In re Bloom*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of a judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)." Specifically, *In re Boon*, 169 USPQ 231, 234 states "as we held *Ahlert*, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the challenge, with nothing more, would be all that was needed". Further note that 37 CFR § 1.671(c)(3) states "Judicial notice means official notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight.

21. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being obvious over Cohen in view of Wireless Session Protocol Specification (Approved Version 05-July-2001, Copyright 2001 Wireless Application Protocol Forum) hereinafter referred to as WSP Spec.

22. With respect to claim 9, Cohen teaches (claim 8) a method of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 8 above. Cohen does not disclose expressly (claim 9) said method wherein

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determining a first source address and a first source port from the request includes:

- receiving a connect request; and
- extracting a client ID from the connect request.

WSP Spec, in an analogous field, teaches a method of:

- receiving a connect request (p. 45 figures 1 and 2, p. 46 fig. 3); and
- extracting a client ID from the connect request (p. 23 section 6.3.3.1, Client Address (client ID) is a parameter of an S-Connect (connect request)).

At the time of invention it would have been obvious to a person of ordinary skill in the art to modify the method of balancing a data load on a network as taught by Cohen by taking the following steps when determining a first source address and a first source port from the request as taught by WSP Spec:

- receiving a connect request; and
- extracting a client ID from the connect request.

The motivation for doing so would have been so that PDAs (Personal Digital Assistants) and mobile phones can be used as clients. Therefore, it would have been obvious to combine Cohen with WSP Spec to obtain the invention as specified in claim 9.

23. With respect to claim 10, Cohen teaches (claim 8) a method of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 8 above. Cohen does not disclose expressly (claim 10) said method wherein

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determining a first source address and a first source port from the request

includes:

- receiving a resume request; and
- extracting a client ID from the resume request.

WSP Spec, in an analogous field, teaches a method of:

- receiving a resume request (p. 47 figures 6 and 7); and
- extracting a client ID from the resume request (p. 28 section 6.3.3.4).

At the time of invention it would have been obvious to a person of ordinary skill in the art to modify the method of balancing a data load on a network as taught by Cohen by taking the following steps when determining a first source address and a first source port from the request as taught by WSP Spec:

- receiving a resume request; and
- extracting a client ID from the resume request.

The motivation for doing so would have been so that PDAs (Personal Digital Assistants) and mobile phones can be used as clients. Therefore, it would have been obvious to combine Cohen with WSP Spec to obtain the invention as specified in claim 10.

24. Claims 11, 12, 29, and 30 are rejected under 35 U.S.C. 103(a) as being obvious over Cohen in view of Wireless Transport Layer Security Specification (Version 06-Apr-2001, Copyright 2001 Wireless Application Protocol Forum) hereinafter referred to as WTLS Spec, and WSP Spec.

25. With respect to claim 11, Cohen teaches a method of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 8 above. Cohen does not disclose expressly (claim 11) said method wherein determining a first source address and a first source port from the request includes:

- receiving an abbreviated handshake;
- extracting a session ID from the abbreviated handshake; and
- determining a client ID from the session ID.

WTLS Spec, in an analogous field, teaches a method of determining a first source address and a first source port from a request including:

- receiving an abbreviated handshake (p. 52 last ¶ - p. 53 1st ¶ after fig. 6, fig. 6); and
- extracting a session ID from the abbreviated handshake (p. 61 (bottom table, ClientHello struct), p. 53 fig. 6).

WTLS Spec does not expressly teach a method of determining a first source address and a first source port from a request including:

- determining a client ID from the session ID.

WSP Spec, in an analogous field, teaches a method of determining a client ID from a session ID (p. 50 section 7.1.4.3, p. 50 section 7.1.5 1st ¶). At the time of invention it would have been obvious to a person of ordinary skill in the art to modify the method of balancing a data load on a network as taught by Cohen by taking the following steps when determining a first source address and a first source port from the request:

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- receiving an abbreviated handshake as taught by WTLS Spec;
- extracting a session ID from the abbreviated handshake as taught by WTLS Spec; and
- determining a client ID from the session ID as taught by WSP Spec.

The motivation for doing so would have been to accommodate mobile clients that use the WAP communication protocol, such as PDAs and mobile phones, and provide them with a secure connection method (WTLS Spec (p. 19 section 6.3.1^{1st ¶})). Therefore, it would have been obvious to combine Cohen with WTLS Spec and WSP Spec to obtain the invention as specified in claim 11.

26. With respect to claim 12, Cohen teaches a method of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 8 above. Cohen does not disclose expressly (claim 12) said method wherein determining a first source address and a first source port from the request includes:

- receiving a full handshake;
- extracting a session ID from the full handshake; and
- determining a client ID from the session ID.

WTLS Spec, in an analogous field, teaches a method of determining a first source address and a first source port from a request including:

- receiving a full handshake (p. 51 last ¶ - fig. 5); and
- extracting a session ID from the abbreviated handshake (p. 61 (bottom table, ClientHello struct), p. 52 fig. 5).

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WTLS Spec does not expressly teach a method of determining a first source address and a first source port from a request including:

- determining a client ID from the session ID.

WSP Spec, in an analogous field, teaches a method of determining a client ID from a session ID (p. 50 section 7.1.4.3, p. 50 section 7.1.5 1st ¶). At the time of invention it would have been obvious to a person of ordinary skill in the art to modify the method of balancing a data load on a network as taught by Cohen by taking the following steps when determining a first source address and a first source port from the request:

- receiving a full handshake as taught by WTLS Spec;
- extracting a session ID from the full handshake as taught by WTLS Spec;
- and
- determining a client ID from the session ID as taught by WSP Spec.

The motivation for doing so would have been to accommodate mobile clients that use the WAP communication protocol, such as PDAs and mobile phones, and provide them with a secure connection method (WTLS Spec (p. 19 section 6.3.1 1st ¶)). Therefore, it would have been obvious to combine Cohen with WTLS Spec and WSP Spec to obtain the invention as specified in claim 12.

27. With respect to claim 29, Cohen teaches a system for balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 28 above. Cohen does not expressly teach said system wherein the determining a first source address and a first source port from the request includes:

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- receiving at least one of a group consisting of a handshake, a connect request, and a resume request.

WSP Spec, in an analogous field, teaches request protocols on a communication link including a connect request (p. 45 figures 1 and 2, p. 46 fig. 3) and a resume request (p. 47 figures 6 and 7). WTLS Spec, in an analogous field, teaches request protocols on a communication link including a handshake (p. 51-54 section 10.3). At the time of invention it would have been obvious to a person of ordinary skill in the art to modify the system for balancing data load on a network as taught by Cohen by taking the following steps (claims 29 and 30) when determining a first source address and a first source port:

- receiving at least one of a group consisting of a handshake as taught by WTLS Spec, a connect request as taught by WSP Spec, and a resume request as taught by WSP Spec.

The motivation for doing so would have been to modify the system to accommodate clients that use the WAP communication protocol, such as PDAs and mobile phones, and provide them with a secure connection method (WTLS Spec (p. 19 section 6.3.1 1st ¶)). Therefore, it would have been obvious to combine Cohen with WTLS Spec and WSP Spec to obtain the invention as specified in claims 29 and 30.

28. Claim 14 is rejected under 35 U.S.C. 103(a) as being obvious over Cohen in view of How Network Address Translation Works (by Jeff Tyson, URL:

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<http://web.archive.org/web/20010209153957/www.howstuffworks.com/nat.htm>, 2/9/2004) hereinafter referred to as Tyson. Cohen teaches claims 8 and 13 as discussed in 35 USC § 102 rejections above. Cohen does not expressly teach the method of claim 13, wherein storing includes storing the corresponding source addresses and the corresponding source ports in a table. Tyson, in an analogous field, teaches a method for network address translation on a network comprising:

- (claim 8) receiving a request from a client (Overloading Example - bullet 4);
- (claim 8) remapping the first source address of the request to a front-end processor source address (Overloading Example – bullet 5 lines 2-4);
- (claim 8) remapping the first source port of the request to a front-end processor source port (Overloading Example – bullet 5 lines 4-7); and
- (claim 13) storing the first source address and the corresponding front-end processor source address (Overloading Example – bullet 5 lines 1-2); and
- (claim 13) storing the first source port and the corresponding front-end processor source port (Overloading Example – bullet 5 lines 1-2); and
- (claim 14) wherein storing includes storing the corresponding source addresses and the corresponding source ports in a table (Overloading Example – bullet 5 lines 1-2).

At the time of invention it would have been obvious to a person of ordinary skill in the art to modify the method of balancing data load on a network as taught by Cohen by storing the corresponding source addresses and the corresponding

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source ports in a table as taught by Tyson. The motivation for doing so would have been so that the front-end processor can remap responses to their respective clients. Therefore, it would have been obvious to combine Cohen with Tyson to obtain the invention as specified in claim 14.

29. Claim 15 is rejected under 35 U.S.C. 103(a) as being obvious over Cohen in view of Verkler et al. (U.S. 5,850,517) hereinafter referred to as Verkler, WSP Spec, and WTLS Spec. Cohen teaches a method of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 8 above. Cohen does not expressly teach (claim 15) said method of balancing a data load on a network wherein:

- if the request includes at least one of a group consisting of a connect, a resume, and a handshake, then:
 - assigning the client to a selected agent of a plurality of agents, such that a data load is substantially balanced across the plurality of agents.

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Verkler, in an analogous field, teaches a method of balancing a data load on a network wherein:

- if a request comes from a client on a mobile link (fig. 4 (205)) then:
 - assigning a client to a selected agent of a plurality of agents, such that a data load is substantially balanced across the plurality of agents (col. 8 lines 38-53).

Verkler does not expressly teach said request including at least one of a group consisting of a connect, a resume, and a handshake. WSP Spec, in an analogous field, teaches requests on a mobile communication link including a connect (p. 45 figures 1 and 2, p. 46 fig. 3) and a resume (p. 47 figures 6 and 7).

WTLS Spec, in an analogous field, teaches a request on a mobile communication link consisting of a handshake (p. 51-54 section 10.3). At the time of invention it would have been obvious to a person of ordinary skill in the art to modify the method of balancing data load on a network as taught by Cohen by incorporating the following steps (claim 15):

- if the request includes at least one of a group consisting of a connect as taught by WSP Spec, a resume as taught by WSP Spec, and a handshake as taught by WTLS Spec, then:
- assigning the client to a selected agent of a plurality of agents, such that a data load is substantially balanced across the plurality of agents as taught by Verkler.

The motivation for doing so would have been to accommodate mobile clients that use the WAP communication protocol, such as PDAs and mobile phones, and

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provide them with a secure connection method (WTLS Spec (p. 19 section 6.3.1 1st ¶)). Therefore, it would have been obvious to combine Cohen with Verkler, WSP Spec, and WTLS Spec to obtain the invention as specified in claim 15.

30. Claims 17, 18, 19, 33, 34, and 35 are rejected under 35 U.S.C. 103(a) as being obvious over Cohen in view of Verkler.

31. With respect to claim 17, Cohen teaches a method of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 8 above. Cohen does not disclose expressly said method wherein remapping the first source address of the request to the front-end processor source address includes:

- remapping the first source address of the request to a selected agent source address wherein the selected agent is one of a plurality of agents; and
- wherein remapping the first source port of the request to the front-end processor source port includes remapping the first source port of the request to source port of the selected agent.

Verkler, in an analogous field, teaches a method of balancing a data load on a network wherein requests are distributed to a selected agent wherein the selected agent is one of a plurality of agents (col. 8 lines 38-53). At the time of invention it would have been obvious to a person of ordinary skill in the art to

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modify the method of balancing a data load on a network taught by Cohen by including the following steps when remapping the first source address of the request to the front-end processor source address:

- remapping the first source address of the request to a selected agent source address, the selected agent being taught by Verkler, wherein the selected agent is one of a plurality of agents as taught by Verkler; and
- wherein remapping the first source port of the request to the front-end processor source port, as taught by Cohen, includes remapping the first source port of the request to source port of the selected agent.

The motivation for selecting an agent from a plurality of agents, as taught by Verkler, would have been to perform automatic load balancing (Verkler col. 8 line 39). The motivation for remapping the first source address of the request to a selected agent source address and port would have been to identify the agent that is handling a connection and to translate the destination address and port number of a response to the address and port number of the client that originated the request (Cohen col. 8 lines 40-45). Therefore, it would have been obvious to combine Cohen with Verkler to obtain the invention as specified in claim 17.

32. With respect to claims 18 and 34, Cohen teaches a method of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 8 above and a system of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 28 above. Cohen does not disclose expressly said method or said system wherein the network includes a wireless network.

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Verkler, in an analogous field, teaches a method and a system of balancing a data load on a network, wherein the network includes a wireless network (fig. 4 (205)). At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the method or system taught by Cohen by using a wireless network as taught by Verkler. The motivation for doing so would have been to accommodate mobile clients. Therefore, it would have been obvious to combine Cohen with Verkler to obtain the invention as specified in claims 18 and 34.

33. With respect to claims 19 and 35, Cohen teaches a method of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 8 above and a system of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 28 above. Cohen does not disclose expressly said method or said system wherein the client is a mobile user terminal. Verkler, in an analogous field, teaches a method and a system of balancing a data load on a network, wherein the client is a mobile user terminal (fig. 4 (201 and 204 (misnumbered - should also be 201))). At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the method or system taught by Cohen by using a mobile link so that the client can be a mobile user terminal. The motivation for doing so would have been so that the client has enhanced freedom of mobility. Therefore, it would have been obvious to combine Cohen with Verkler to obtain the invention as specified in claims 19 and 35.

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53. With respect to claim 33, Cohen teaches a system of balancing a data load on a network as discussed in the 35 USC § 102 rejection of claim 28 above. Cohen does not disclose expressly said system wherein the remapping the first source address of the request to a front-end processor source address includes:

- remapping the first source address of the request to a selected agent source address wherein the selected agent is one of a plurality of agents; and
- wherein remapping the first source port of the request to the front-end processor source port includes remapping the first source port of the request to a source port of the selected agent.

Verkler, in an analogous field, teaches a system of balancing a data load on a network wherein requests are distributed to a selected agent wherein the selected agent is one of a plurality of agents (col. 8 lines 38-53). At the time of invention it would have been obvious to a person of ordinary skill in the art to modify the method of balancing a data load on a network taught by Cohen by taking following steps when remapping the first source address of the request to the front-end processor source address:

- remapping the first source address of the request to a selected agent source address, the selected agent being taught by Verkler, wherein the selected agent is one of a plurality of agents as taught by Verkler; and
- wherein remapping the first source port of the request to the front-end processor source port, as taught by Cohen, includes remapping the first source port of the request to a source port of the selected agent.

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The motivation for selecting an agent from a plurality of agents, as taught by Verkler, would have been to perform automatic load balancing (Verkler col. 8 line 39). The motivation for remapping the first source address of the request to a selected agent source address and port would have been to identify the agent that is handling a connection and to translate the destination address and port number of a response to the address and port number of the client that originated the request (Cohen col. 8 lines 40-45). Therefore, it would have been obvious to combine Cohen with Verkler to obtain the invention as specified in claim 33.

Response to Arguments

34. Applicant's arguments filed February 14, 2005 have been fully considered but they are not persuasive.

35. Applicant contends that Cohen does not teach sending the remapped request to an origin server. Examiner respectfully disagrees. The proxy cache responds to requests (col. 8 lines 56-57) and can therefore reasonably be considered a server. The proxy cache is the origin of responsive packets (col. 8 lines 56-57) and can therefore reasonably be considered an origin server.

Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

37. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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38. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

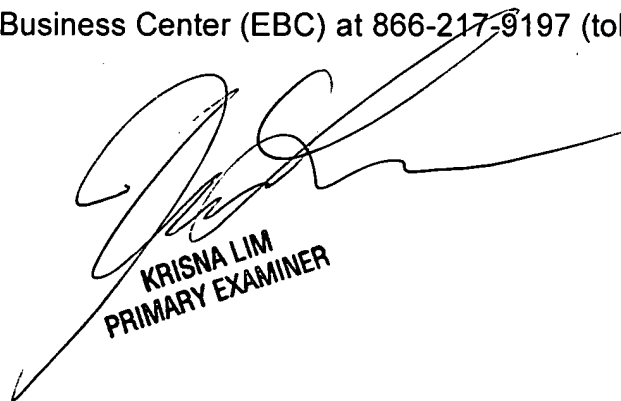
39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip S. Scuderi whose telephone number is (571) 272-5865. The examiner can normally be reached on Monday-Friday 8am-5pm.

40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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41. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PSS



KRISNA LIM
PRIMARY EXAMINER